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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/910,903	07/24/2001	Vittorio Fossati	Q65520	3372

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SUGHRUE, MION, ZINN,
MACPEAK & SEAS, PLLC
2100 Pennsylvania Avenue, N.W.
Washington, DC 20037-3213

EXAMINER

CONTEE, JOY KIMBERLY

ART UNIT	PAPER NUMBER
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2686

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DATE MAILED: 03/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/910,903

Applicant(s)

FOSSATI ET AL.

Examiner

Joy K Contee

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on July 24, 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 July 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3-4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1,7,9,10 are rejected under 35 U.S.C. 102(b) as being anticipated by Suonvieri, U.S. Patent No. 5,831,974.

Regarding claim 1, Suonvieri discloses a method for the management of telecommunications network elements, comprising:

management functions of said network elements through a management system (i.e., reads on Operation and Maintenance Center (OMC)) and terminals (i.e., reads on STM testing equipment) located at said network elements (i.e., reads on base stations) or in operating centers (col. 3, lines 13-30),

wherein it is provided an additional management function of said network elements through one or more terminals placed remotely and simulating the functions of said terminals located at said network elements or in operating centers (col. 3, lines 31-43).

Regarding claim 7, Suonvieri further discloses a device reads on OMC) for the management of telecommunications network elements, comprising a management system, for said network elements, and terminals located at said network elements or in

operating centers, wherein it further comprises circuitry (i.e., apparatus such STM and base stations) for the implementation of the method as in claim 1 (col. 3, lines 13-43).

Regarding claim 9, Suonvieri also discloses a telecommunications network comprising a device (i.e., reads on OMC) according to claim 7 (col. 3, lines 13-43).

Regarding claim 10, Suonvieri discloses a telecommunications network element comprising a device (i.e., reads on base station) as in claim 7 (col. 3, lines 13-43).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 2-5,8 and 11-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suonvieri, in view of LaRosa et al. (LaRosa), U.S. Patent No. 6,628,965.

Regarding claim 2, Suonvieri discloses a method according to claim 1, but fails to disclose wherein said remotely placed terminals comprise mobile terminals connected to said management system through one or more networks, for instance GSM and Internet, and using WAP or UMTS communication protocols.

In a similar field of endeavor, LaRosa discloses wherein said remotely placed terminals comprise mobile terminals (e.g., palm-based PCs, PDAs) connected to said management system (i.e., reads on monitor module 39, see Fig. 4) through one or more

networks, for instance GSM and Internet, and using WAP (i.e., reads on middleware) or UMTS communication protocols (col. 9, line 45 to col. 10, line 4 and col. 14, lines 8-12).

At the time of the invention it would have been obvious to one of ordinary skill in the art to modify Suonvieri to include remote terminals connected to a wireless protocol such as Internet and using middleware (i.e., WAP) for the purpose of allowing the user an interface to operate and manage a telecommunications system.

Regarding claim 3, Suonvieri discloses a method according to claim 1. Suonvieri as modified by LaRosa discloses the limitations to claim 2, LaRosa further discloses wherein said additional management function of network elements through one or more terminals placed remotely is performed by a software module cooperating with other software modules, which form said management system, located in said network elements, and performs the functions of:

management of the bidirectional communication protocol between said remotely placed terminals and said management system (col. 6, lines 45-67 and col. 13, line 66 to col. 14, line 12);

management of said network elements by said remotely placed terminals (col. 13, line 66 to col. 14, line 12).

At the time of the invention it would have been obvious to one of ordinary skill in the art to modify Suonvieri to include management of said bi-directional communications for the purpose of monitoring wireless extension activities using software modules for easy interface.

Regarding claim 4, Suonvieri as modified by LaRosa discloses a method according to claim 3. LaRosa further discloses wherein said software module is integrated with said other software modules (i.e., reads on applications interfacing with certain modules) in said network elements (col. 9, lines 46-50).

At the time of the invention it would have been obvious to one of ordinary skill in the art to modify Suonvieri to include integrated software modules for the purpose allowing different modules to work together in network management.

Regarding claim 5, Suonvieri as modified by LaRosa discloses a method according to claim 3, wherein said software module is placed outside said network elements in a suitable apparatus (i.e., reads on wireless control program subsystem running on computer) (see LaRosa, col. 2, lines 55-57).

At the time of the invention it would have been obvious to one of ordinary skill in the art to modify Suonvieri to include said software module outside of the network element such that the network element is controlled remotely.

Regarding claim 8, Suonvieri discloses a remote terminal comprising an interface for {cooperating} with the device of claim 7, but fails to disclose an interface for cooperating with the through WAP or UMTS communication protocols, for the implementation of the method as in claim 1.

In a similar field of endeavor, LaRosa discloses an interface (i.e., reads on applications 5, see Fig. 1) for cooperating with the device (i.e., monitor module 39, see Fig. 4) through WAP or UMTS communication protocols, for the implementation of the

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method as in claim 1 (col. 9, line 60 to col. 10, line 4 and col. 13, line 66 to col. 14, line 12).

At the time of the invention it would have been obvious to one of ordinary skill in the art to modify Suonvieri to include remote terminals connected to a wireless protocol such as Internet and using middleware (i.e., WAP) for the purpose of allowing the user an interface to operate and manage a telecommunications system.

Regarding claim 11, Suonvieri as modified by LaRosa discloses a computer program comprising an inherent encoder (i.e., said medium is used to load wireless control program subsystem, wherein computer executes various modules of program by control of internal microprocessor) adapted to carry out all the steps of claim 3 when said program is run on a computer (see LaRosa, col. 9, line 65 to col. 10, line 4).

At the time of the invention it would have been obvious to one of ordinary skill in the art to modify the test equipment of Suonvieri to include a computer for managing the telecommunications network for the purpose of expanding the testing equipment's software capabilities.

Regarding claim 12, Suonvieri as modified by LaRosa discloses computer-readable medium (i.e., reads on CD-ROM or floppy disk) having a program recorded thereon, said computer-readable medium comprising an inherent encoder (i.e., said medium is used to load wireless control program subsystem, wherein computer executes various modules of program by control of internal microprocessor) adapted to carry out all the steps of claim 3 when said program is run on a computer (see LaRosa, col. 9, line 65 to col. 10, line 20).

At the time of the invention it would have been obvious to one of ordinary skill in the art to modify the test equipment of Suonvieri to include a computer for managing the telecommunications network for the purpose of expanding the testing equipment's software capabilities.

5. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Suonvieri and LaRosa, in further view of Barker et al., U.S. Patent No. 6,363,421.

Regarding claim 6, Suonvieri as modified by LaRosa, discloses a method according to claim 3. The combination fails to disclose wherein said software module, for said function of carrying out the management of said network elements by said remotely placed terminals, carries out the following operational steps:

in a first step it is waiting for a request from bidirectional communication protocol management function between said remotely placed terminals and said management system;

in a second and third steps, through communication with said other software module, it carries out a conversion of the request from said first step into one or more requests for said other modules for the management of the request itself;

in a fourth step it manages responses to said requests coming from said other software modules, by repeating said third and fourth steps up to the exhaustion thereof;

in a fifth step it creates a file containing information suitable for creating response visual displays on said remotely placed terminals;

in a sixth step it sends said file to said bidirectional communication protocol management function between said remotely placed terminals and said management system and then returns to said first step.

In a similar field of endeavor Barker discloses wherein said software module, for said function of carrying out the management of said network elements by said remotely placed terminals, carries out the following operational steps:

in a first step it is waiting for a request from bidirectional communication protocol (i.e., reads on SNMP) management function between said remotely placed terminals and said management system (i.e., reads on SNMP retry mechanism) (col. 21, lines 1-24);

in a second and third steps, through communication with said other software module, it carries out a conversion of the request from said first step into one or more requests for said other modules for the management of the request itself (i.e., reads on trap receipt and delivery) (col. 21, lines 25-45);

in a fourth step it manages responses to said requests coming from said other software modules, by repeating said third and fourth steps up to the exhaustion thereof (i.e., reads on Client Command Request/Response) (col. 22, lines 45-59);

in a fifth step it creates a file containing information suitable for creating response visual displays on said remotely placed terminals (col. 4, lines 43-55);

in a sixth step it sends said file to said bidirectional communication protocol (i.e., reads on SNMP) management function between said remotely placed terminals and said management system and then returns to said first step (col. 4, lines 37-55).

At the time of the invention it would have been obvious to one of ordinary skill in the art to modify Suonvieri to include a SNMP type client request and response application for the purpose of an alternative means of exchanging information necessary for system management.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Vimpari et al., U.S. Patent No. 6,169,883, discloses a remote test of a subscriber connection in a system implementing a wireless subscriber connection.

Vucetic et al., U.S. Patent No. 5,819,177, discloses a fixed wireless terminals with network management method and apparatus.

Torkki et al., U.S. Patent No. 6,636,742, discloses tracking of mobile terminal equipment in a mobile communications system.

Ortiz Perez et al., U.S. Patent No. 5,966,428, discloses self diagnostic system.

Bouvier et al., U.S. Patent No. 5,961,594 discloses a remote node maintenance and management method and system in communication networks using multiprotocol agents.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joy K Contee whose telephone number is 703-308-0149. The examiner can normally be reached on 5:30 a.m. to 2:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marsha Banks-Harold can be reached on 703-305-4379. The fax phone

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number for the organization where this application or proceeding is assigned is 703-872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-306-0377.



Joy Contee

February 19, 2004



CHARLES APPIAH
PRIMARY EXAMINER